

WHAT IS CLAIMED IS:

1. A resin material remolding method comprising:
 - a preparation step of preparing pulverized pieces obtained upon pulverization of a coated resin molded product and coating film peeling of pulverized pieces;
 - a determination step of sensing and determining the presence/absence of adhesion of the coating film for each individual pulverized piece after the preparation step;
 - 10 a separation step of separating a pulverized piece having the coating film adhered from pulverized pieces having no coating film adhered, on the basis of the determination result; and
 - a molding step of performing molding by using the pulverized pieces having no coating film adhered after the separation step.
2. The method according to claim 1, wherein the determination step senses and determines the presence/absence of adhesion of the coating film by sensing the coating film itself or a specific material present in the coating film by using a sensor.
3. The method according to claim 2, wherein the determination step executes the sensing by using a photosensor for sensing the coating film on the basis of a difference in lightness, saturation, or hue from a

background color set behind the pulverized pieces and different from a coating film color.

4. The method according to claim 2, wherein the
5 sensing is executed by sensing means for irradiating the pulverized pieces with X-rays, and sensing X-rays having a specific wavelength excited from a specific material present in the coating film.

10 5. The method according to claim 2, wherein the sensing is executed for the pulverized pieces in a plurality of directions.

6. The method according to claim 1, wherein
15 the determination step executes the sensing in a specific position midway along a moving path in which the pulverized pieces are moved in a specific direction, and

the separation step executes the separation, when
20 a pulverized piece having the coating film adhered is sensed in the determination step, by blowing a gas against the pulverized piece to change a moving direction of the pulverized piece having the coating film adhered to a direction different from a moving
25 direction of a pulverized piece having no coating film adhered.

7. The method according to claim 6, wherein the movement of the pulverized pieces is falling.

8. The method according to claim 1, wherein
5 in the pulverization, the coated resin molded product is pulverized at random by using a cutting tool having a rotary blade, and

the determination step is executed, after pulverized pieces are classified into a plurality of
10 groups in accordance with particle diameters of the pulverized pieces, for each classified particle-diameter group.

9. The method according to claim 1, wherein the
15 coated resin molded product is a used automobile part.

10. An apparatus for selecting resin material pulverized pieces obtained upon pulverization of a coated resin molded product and coating film peeling of
20 pulverized pieces, comprising:

a sensor placed in a specific position with respect to the pulverized pieces to sense a pulverized piece having a coating film adhered on the basis of the coating film itself or a specific material present in
25 the coating film;

determining means for determining the pulverized piece having the coating film adhered on the basis of

the result of sensing by said sensor; and

separating means for separating the pulverized piece having the coating film adhered from pulverized pieces having no coating film adhered on the basis of
5 the result of determination by said determining means.

11. The apparatus according to claim 10, wherein said sensor is a photosensor for sensing the coating film on the basis of a difference in lightness, saturation, or
10 hue from a background color different from a coating film color.

12. The apparatus according to claim 10, wherein said sensor is X-ray sensing means for sensing X-rays having
15 a specific wavelength excited from a specific material present in the coating film when a pulverized piece is irradiated with X-rays.

13. The apparatus according to claim 10, wherein a
20 plurality of said sensors are arranged to sense the presence/absence of adhesion of the coating film for pulverized pieces in a plurality of directions.

14. The apparatus according to claim 10, further
25 comprising moving means for moving pulverized pieces in a specific direction, wherein

said separating means is placed in a specific

position midway along a moving path of said moving means for moving pulverized pieces and comprises gas blowing means for, when said determining means senses a pulverized piece having the coating film adhered,

- 5 blowing a gas against the pulverized piece to change a moving direction of the pulverized piece having the coating film adhered to a direction different from a moving direction of a pulverized piece having no coating film adhered, thereby executing the separation.

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15. The apparatus according to claim 14, wherein said moving means is dropping means for dropping pulverized pieces.

- 15 16. The apparatus according to claim 10, further comprising classifying means placed in a pulverized piece charge port to classify pulverized pieces into a plurality of groups in accordance with particle diameters of the pulverized pieces,

20 wherein said sensor performs the sensing for each of said plurality of groups of the pulverized pieces.

17. The apparatus according to claim 16, wherein said classifying means is a screening device for classifying
25 pulverized pieces in accordance with the particle diameter.